

WHAT IS CLAIMED IS:

1           1. A power generating wind turbine comprising a nacelle  
2 installed on a tower, said nacelle comprising therein or thereon a  
3 main shaft to which a wind turbine rotating blade is fitted, a gear-  
4 box by which a rotation of said main shaft is speeded up to be put  
5 out and a generator driven by an output of said gear-box, wherein  
6 said main shaft is connected to an end of an input shaft of said gear-  
7 box and is supported to said nacelle via a single double-row tapered  
8 roller bearing.

1           2. A power generating wind turbine comprising a nacelle  
2 installed on a tower, said nacelle comprising therein or thereon a  
3 main shaft to which a wind turbine rotating blade is fitted, a gear-  
4 box by which a rotation of said main shaft is speeded up to be put  
5 out and a generator driven by an output of said gear-box, wherein  
6 said main shaft is connected to an end of an input shaft of said gear-  
7 box and is supported to said nacelle via a single three-row roller  
8 bearing comprising a row of rollers receiving a radial load and a pair  
9 of rows of rollers receiving a thrust load.

1           3. A power generating wind turbine as claimed in Claim 1 or  
2 2, wherein said main shaft is formed in an annular shape or a disk  
3 shape having its outer diameter made larger than its axial directional  
4 length.

1           4. A power generating wind turbine as claimed in Claim 1 or  
2 2, wherein said main shaft and said input shaft of said gear-box are

3 connected to each other via a coupling.

1 5. A power generating wind turbine as claimed in Claim 3,  
2 wherein said main shaft and said input shaft of said gear-box are  
3 connected to each other via a coupling.